

TRINITRON® COLOR TV



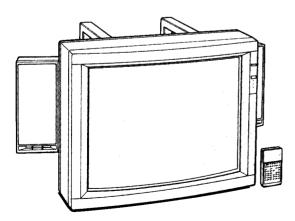
Operating Instructions

Before operating the unit, please read this manual thoroughly and retain it for future reference.

Owner's Record

The model and serial numbers are located at the rear of the unit. Record the serial number in the space provided below. Refer to these numbers whenever you call upon your Sony dealer regarding this product.

Model No	. KV-27FX10	Serial No.
Model No	. KV-2/FX1U	Seriai No



WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.





This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

CAUTION:

TO PREVENT ELECTRIC SHOCK, DO NOT USE THIS POLARIZED AC PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

Note to CATV system installer in the U.S.A.

This reminder is provided to call the CATV system installer's attention to Article 820-22 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

Contents

Before use	
Features Precautions Cocation of controls	3
Set-up	
Preparing the remote commmander	7
Connecting the TV antenna/cable	8
Connecting the speakers	10
Connecting other equipment	11
Presetting TV channels	14
Operation	
Vatching TV programs	18
njoying convenient features	
Setting the clock	
Jsing the programmable remote commander	28
General	
Specifications	34
roubleshooting	

This color TV features a Microblack $^{\text{TM}}$ Trinitron picture tube for a high resolution, high contrast picture.

- IDTV (Improved Definition TV) assures a dense picture with beautiful details and high resolution.
- Multi-band VHF/UHF/CATV tuner receives up to 125 cable channels for a total of 181 possible off-air and cable channels.
- Built-in MTS (Multichannel TV Sound) decoder enables reception of stereo programs and Second Audio Program (SAP) broadcasts.
- S VIDEO IN jack which is connected to the S video output jack on the VCR allows superior playback pictures.
- Variable audio output jacks enable reproduction of TV or video sound through an audio system.
- Monitor output jacks allow VCR recording of the picture and sound being displayed on the TV.
- Surround (Dolby* and Hall surround and Simulated stereo) effect allows you to enjoy a program as if in a theater.
- · On-screen displays

Supplied Remote Commander provides you many other convenient features.

- The programmable remote commander allows you to operate video equipment made by Sony or other manufacturers.
- Automatic programming to preset all receivable channels instantly.
- JUMP button enables switching quickly between two channels.
- . STILL button allows you to freeze a TV picture.
- Sleep timer automatically turns off the TV after approximately one hour.
- ANT/AUX button permits one-touch selection of pay cable TV channels when a converter is connected.
- · Internal clock for the current time display
- AV WINDOW buttons on the Remote Commander allow the picture and sound to be adjusted from a distance.

And other features for a high quality picture...

- New Dynamic Color system assures accurate, life-like skin tones and pure whites.
- Non-interlace system improves vertical resolution and minimizes the inter-line flickers.
- Digital color pure filter totally clears color spill or color noise and produces fine picture detail.
- Digital frame noise reduction greatly reduces picture noise level.
- *"Dolby" and the double-D symbol are trade marks of Dolby Laboratories Licensing Corporation.

Safety

- . Operate the unit only on 120 V AC.
- One blade of the plug is wider than the other for the purpose of safety and will fit into the power outlet only one way. If you are unable to insert the plug fully into the outlet, contact your dealer.
- Should any liquid or solid object fall into the cabinet, unplug the unit and have it checked by qualified personnel before operating it any further.
- Unplug the unit from the wall outlet if it is not going to be used for several days or more. To disconnect the cord, pull it out by the plug. Never pull the cord itself.

Installation

- To prevent internal heat build-up, do not block the ventilation openings.
- Do not install the unit in a hot or humid place or in a place subject to excessive dust or mechanical vibration.

Cleaning

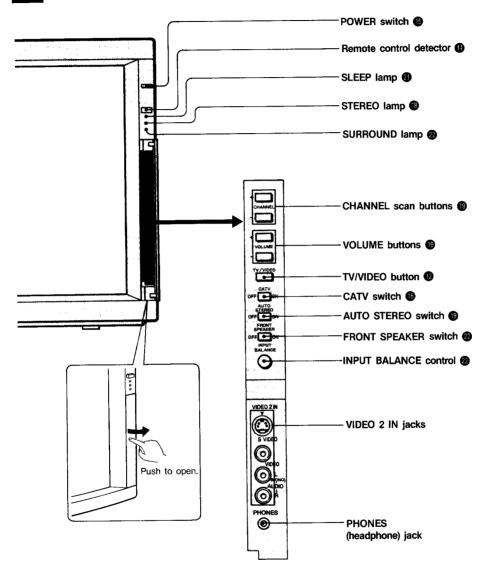
Clean the unit with a slightly damp soft cloth. Use a mild household detergent. Never use strong solvents such as thinner or benzine as they might damage the finish of the cabinet.

Repacking

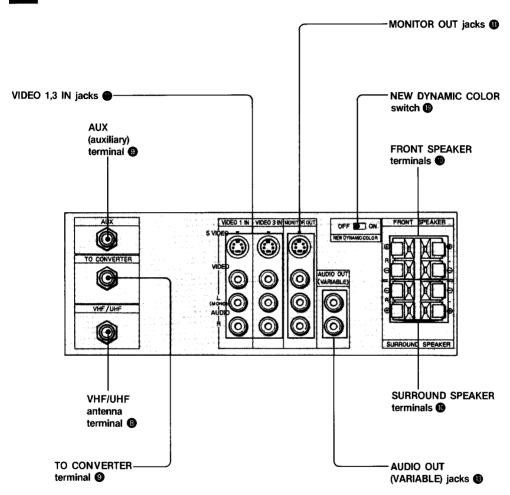
Retain the original carton and packing materials for safe transport of this unit in the future.

Use of this television receiver for other than private viewing of programs broadcast on UHF or VHF or tansmitted by cale companies for the use of the general public may require authorization from the broadcaster/cable company and/or program owner.

Front

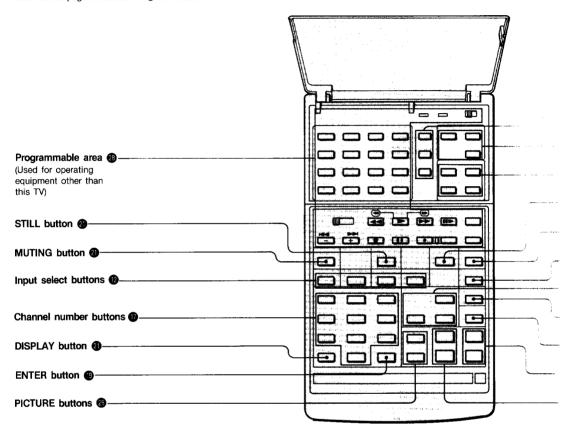


Rear



Programmable Commander RM-760

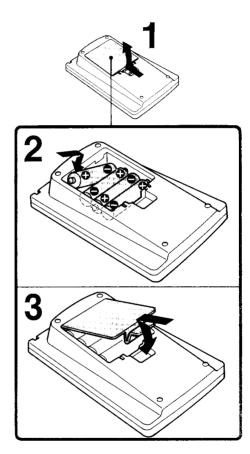
Refer to the pages indicated in • for details.



^{*}The function of these buttons are available on the TV.

Battery Installation

- 1 Push to open the lid.
- 2 Install four size AA (R6) batteries with the correct polarity.
- 3 Replace the lid.



- In normal operation, batteries will last up to half a year.
 If the unit does not operate properly, the batteries might be exhausted. Replace them with new ones.
- To avoid damage from possible battery leakage, remove the batteries when the Commander will not be used for a long time.

Channel presetting buttons (1) (2) Time set buttons (1)

AV·WINDOW buttons @

-SLEEP button 🐠

- POWER switch* (6)

-ANT/AUX button (B)

SURROUND buttons 🚳

- MTS button 🗿

-- JUMP button 🐠

- CH (channel) scan buttons* 📵

- VOL (volume) buttons buttons* **®**

Either an indoor antenna or outdoor antenna can be connected. For better quality picture, connecting an outdoor antenna is recommended.

Cable TV reception is only possible by connecting a cable supplied by your local cable operator.

To Connect a VHF, UHF, or VHF/UHF Combination Antenna* or CATV Cable

Check the cable type and prepare the cable end using the appropriate connector.

75-ohm coaxial cable (round)

Attach an optional F-type connector.

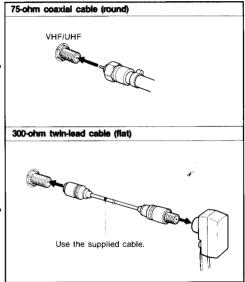
300-ohm twin-lead cable (flat)

Antenna connector

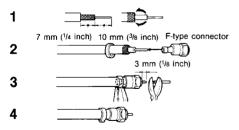
Fastean with a

screwdriver

Plug the connector into VHF/UHF on the rear of the TV.

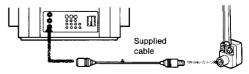


How to attach an F-type connector to the 75-ohm coaxial cable



* Most combination antennas are equipped with a signal splitter. Remove the splitter and attach the appropriate connector.

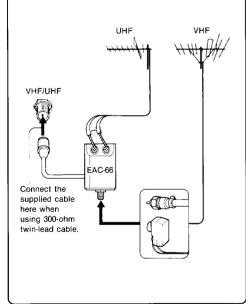
For a better quality picture, it is recommended to use the supplied cable so that the 300 ohm twin-lead cable can be kept at a distance from the TV set.



When you connect both VHF and UHF antennas

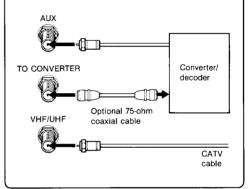
Use the optional EAC-66 U/V mixer.

- Prepare the VHF antenna end using the appropriate connector.
- 2 Connect the cables to the mixer.
- 3 Plug the mixer to VHF/UHF. (When using a 300-ohm twin-lead cable, use the supplied cable to connect the mixer and VHF/UHF terminal.)



When you connect a cable with a special converter/decoder* for pay cable TV systems

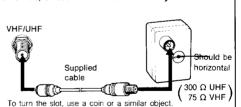
Pay cable TV systems use scrambled or encoded signals and require special converters (decoders) in addition to the normal cable connection.



If the supplied antenna connector has a slot as illustrated below:

The antenna connector can be used also as a U/V mixer

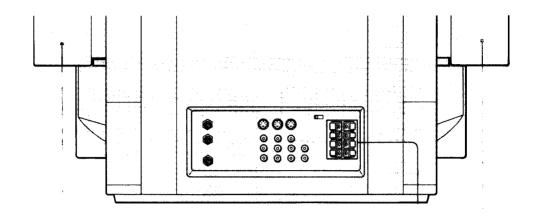
When connecting both 75-ohm VHF and 300-ohm UHF antennas, or 300-ohm UHF antenna only:

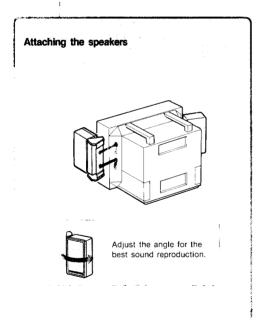


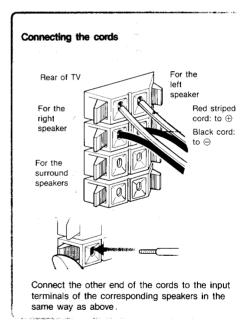
When the U/V mixer is used

Snow and noise may appear in the pictures of the cable TV channels over $37 \ (W+1)$.

*The special converter/decoder will be supplied by the cable system operator.







If you connect surround speakers,

they must be rated at 8-ohm impedance (with normal power holding capacity of more than 7W).

Phasing

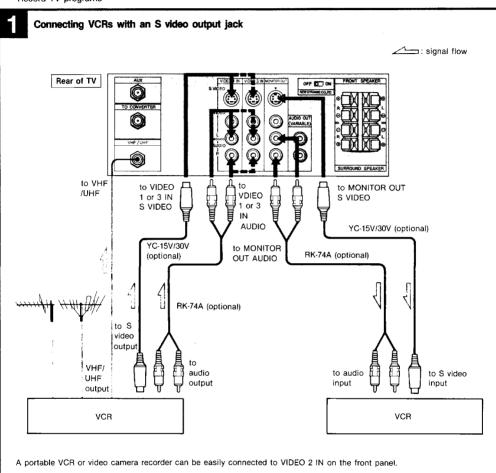
Correct \oplus \ominus connection of both speaker systems ensures proper in-phase operation. If the speaker system is out-of phase, the bass tones seem to be missing and the position of the instruments becomes obscure.

Connecting a VCR

With this connection, you will be able to ...

- -View the playback of video tapes
- -Record TV programs

-Record a TV program while viewing another



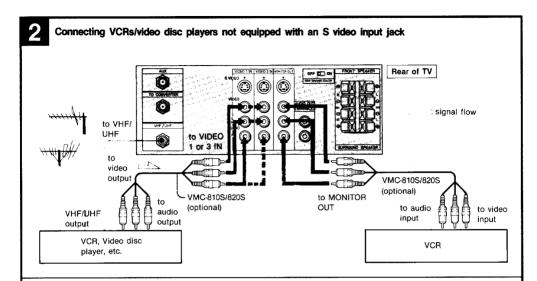
Notes

- Up to three VCRs or other equipment can be connected to VIDEO 1/2/3 IN jacks.
- If you connect a monaural VCR, connect the audio output of the VCR to the L (MONO) jack of VIDEO 1/2/3 IN of the TV.
 The monaural sound is heard from both speakers.
- For operation, refer to the instruction manual furnished with the VCR.
- The signals input from VIDEO 1/2/3 are not ouptut from MONITOR OUT.
- Keep the VCR away from the TV if the picture or sound is affected.
- When the TV is in the video mode, the "VIDEO 1/2/3" indication will be displayed on the screen even though no signal is fed through the VIDEO IN jacks.

About S video input

Video input and output signals may be separated into Y (luminance or brightness) and C (chroma or color) signals. Usually these two signals are combined in a VCR and sent as one signal to a TV. Separation of the Y and C signals prevents them from interfering with one another, thereby improving picture (especially in color) quality.

This unit is equipped with an S video input jack through which these separated signal can be input directly.



Preparations

- 1 Turn on the TV.
- 2 Press the TV/VIDEO button on the TV or an input select button on the commander so that the "VIDEO 1", "VIDEO 2" or "VIDEO 3" indication appears on the screen.

VIDEO 1: for equipment connected to VIDEO 1 IN VIDEO 2: for equipment connected to VIDEO 2 IN VIDEO 3: for equipment connected to VIDEO 3 IN

Operation

For operation, refer to the instruction manual furnished with the VCR.

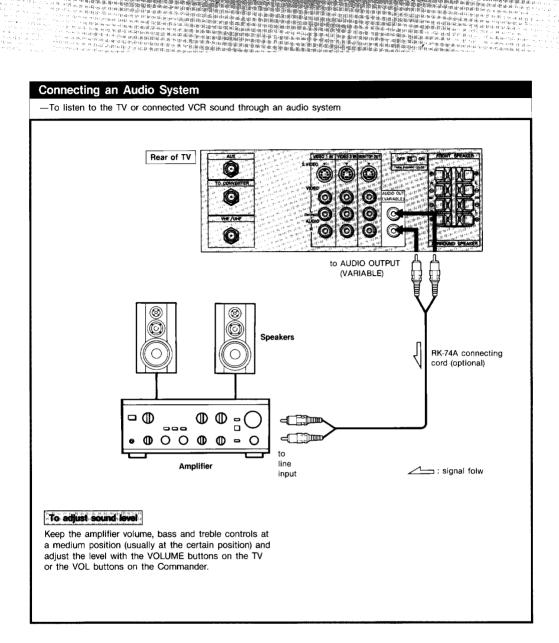
When using a Sony infrared remote control VCR, the VCR can be operated with the supplied Remote Commander.

See "Operating Sony Video Equipment" on page 29.

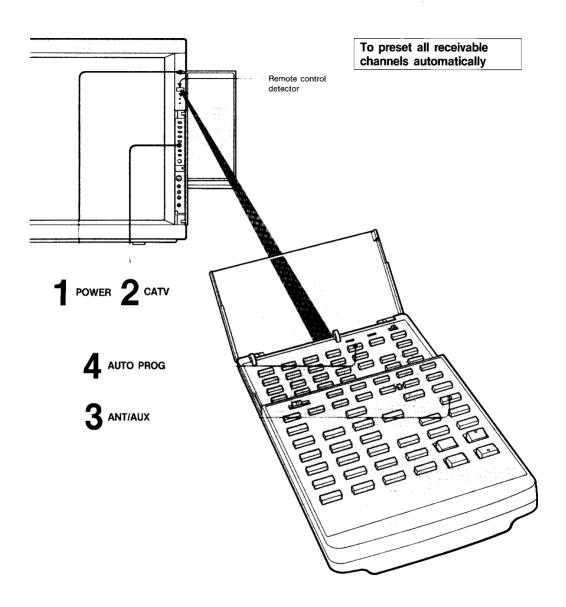
To return to the TV mode

- —Press the TV/VIDEO button on the TV until a channel number appears on the screen.
- -Press the TV button on the Remote Commander.

To view one TV program while recording another Press the TV/VTR mode select button on the VCR or commander so that the VCR will be in the TV mode. Press the TV button on the commander, and select the channel you want to view. When you cannot obtain a clear picture and/or sound Make sure that the TV/VTR mode select button on the VCR is set to TV. Re-select the desired channel with the buttons on the TV or the Remote Commander.

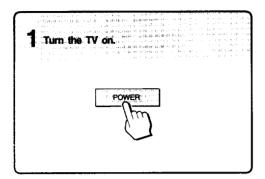


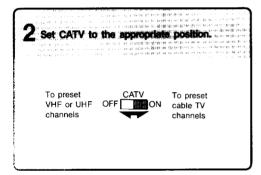
When an audio system is connected to AUDIO OUTPUT, be sure to set the FRONT SPEAKER switch on the TV to OFF. The sound from the TV's speakers will be cut off.

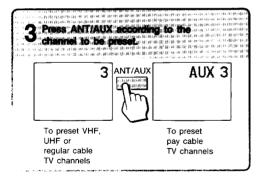


Receivable channels of this TV are:

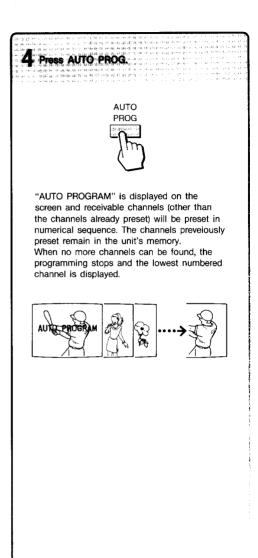
VHF: 2-13 UHF: 14-69 Cable: 1-125 To check preset channels Press CH +/-.



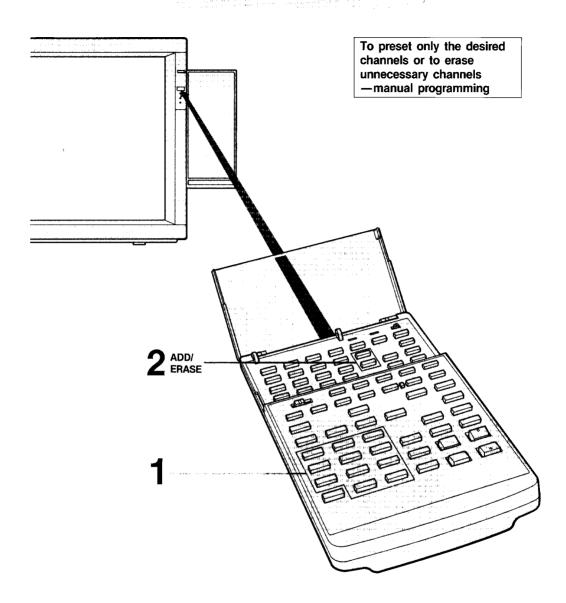




To add the channels that could not be preset with automatic programming because their signal strength was too weak, or to erase unnecessary channels, follow the steps in "To preset only the desired channels" on the next page.



If the "VIDEO" indication is displayed on the screen, press TV/VIDEO so that a channel number appears.



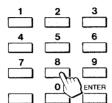
When a VHF or UHF channel is erased

The cable TV channel with the same number is also erased and vice versa.

Cable TV channel chart*

Cable TV systems use letters or numbers to designate channels. To tune in a channel, refer to the chart on the next page.

Press the channel number button(s) and then ENTER to select the channel to be added or erased.





2 To add channels — Press ADD.



A "+" appears for a moment. This channel has now been added to the channel scan memory.

To erase channels - Press ERASE.





A "-" appears for a moment.

This channel has now been erased from the channel scan memory.

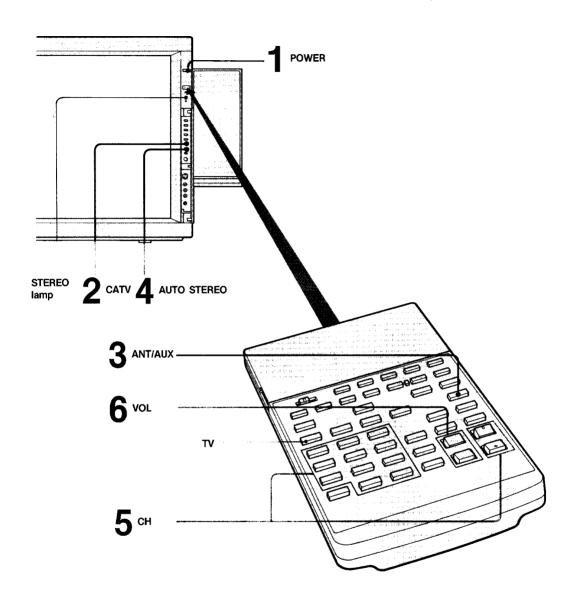
The next time the CH +/- button is pressed, this channel will be skipped.

Repeat steps 1 and 2 for other channels to be added or erased.

Corresponding CATV channel A-8 A-7 A-6 A B C D E F G H I J K L M N O	Р	Р	Р		0	N	М	1	V	-																		
							171	L-		J	- 1	н	G	_F_	E	D	С	В	Α	A-6	A-7	A-8	nel	chan	CATV	ding '	spon	Corre
31 32 33 34 35 36 37 38 39	124	124	124	23	123			102	101	100	99	98	97	96	95	94	93			39	38	37	36	35	34	33	32	31

Check with your local cable TV company for more complete information on the available channels.

*The designation of the cable TV channels conforms to the EIA/NCTA recommendation.



If the "VIDEO 1, 2 or 3" indication is displayed on the screen Press the TV/VIDEO button on the TV or the TV button on the remote commander so that a channel number appears.

If noise makes it hard to receive a very weak TV stereo

Set AUTO STEREO on the TV to OFF so that the STEREO lamp goes off.

The stereo effect will be cancelled, but reception will be stabilized and the noise will be reduced.

1 Press POWER to turn the TV on.

2 Set CATV to the appropriate position

To view VHF or UHF channels



To view cable TV channels

3 Press ANT/AUX according to the channel to be watched.

To view VHF, UHF or regular cable TV channels

4 Set AUTO STEREO to ON.

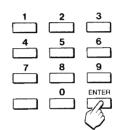
TV channels

AUTO STEREO OFF ON

To turn off the unit Press POWER again. 5 Select a channel in one of the following two ways:



To scan the preset channels in numerical sequence, press CH +/-.

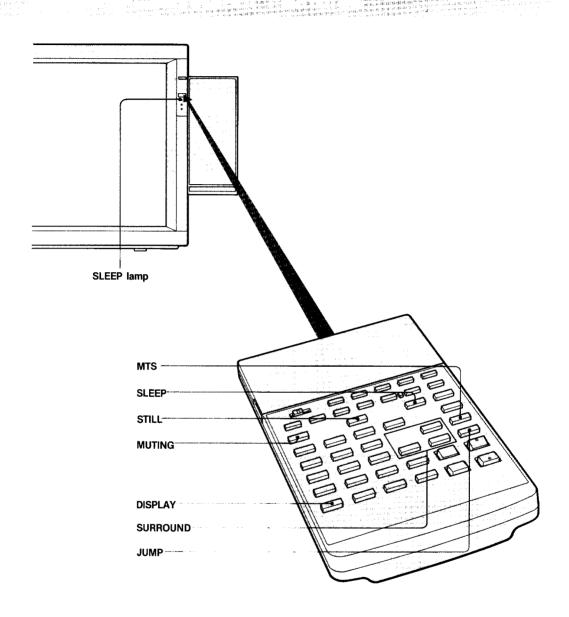


To select a channel directly, press the channel number button(s) and then ENTER. For example, to select channel 10, press 1,0 and ENTER.

6 Press VOL + or - to adjust the volume.



To enjoy life-like skin tones and pure whites Set the NEW DYNAMIC COLOR switch on the rear to ON.



When receiving a Mutichannel TV Sound program

Each time MTS is pressed, MAIN, SAP (Second Andio Program), or both are selected in sequence.

To mute the sound

Press MUTING. The "MUTING" indication will appear on the screen. To restore the sound, press MUTING again or VOL +.

To keep the channel display on the screen

Press **DISPLAY**. To make the channel display disappear, press DISPLAY again.

To have the TV turn off automatically after about one hour

Press SLEEP. The "SLEEP" indication will appear on the screen for a few seconds and the SLEEP lamp on the TV will remain lit until the TV is turned off.

To cancel the SLEEP timer, press SLEEP again so that the SLEEP lamp goes out, or turn off the TV.

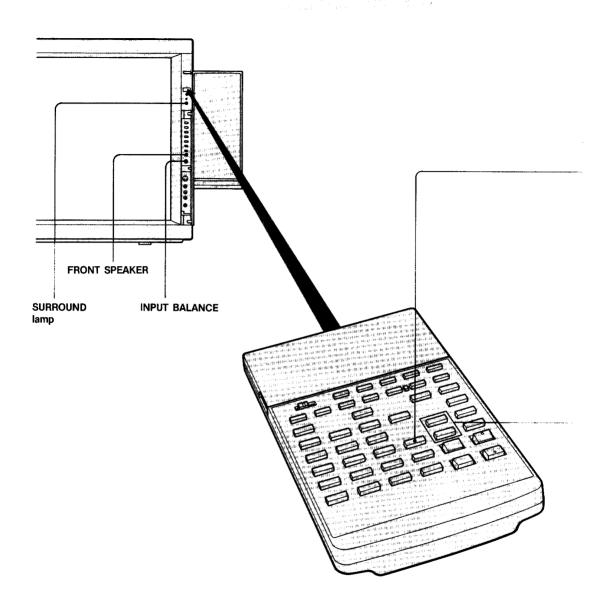
To switch quickly between two channels

Press **JUMP**. Each time JUMP is pressed, the channel which appeared on the screen directly before is recalled. This button enables you to keep track of two programs alternately.

To freeze a TV picture

Press STILL. The TV picture will freeze. Since the broadcast continues normally, while the still picture is on the screen, you will miss a part of the program. To restore the normal picture, press STILL again.

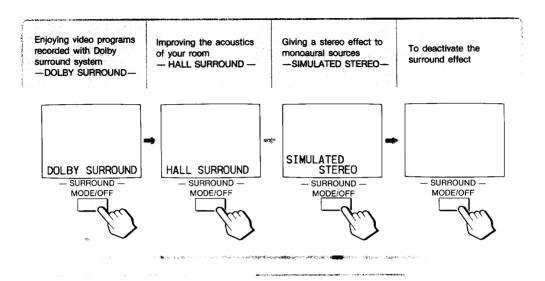




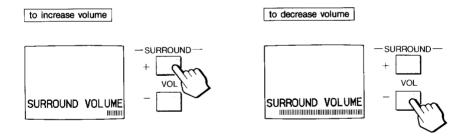
To enjoy Dolby surround effect, attach surround speakers (optional).

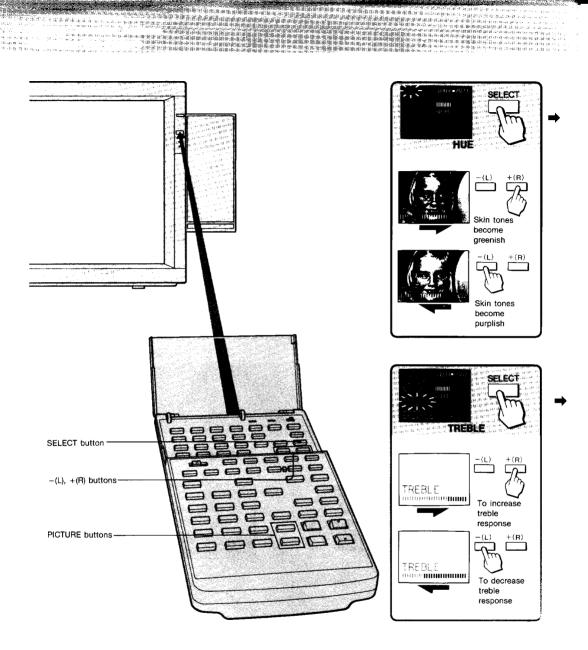
Note on INPUT BALANCE control

Normally, set to the center detent position. When enjoying DOLBY SURROUND, adjust the monaural sound (e.g. dialogue) heard from the right and left surround speakers to be as low as possible by turning the control. During adjustment, set FRONT SPEAKER switch to OFF. For optimum performance of the Dolby surround effect, the monaural sound heard from the surround speakers should be minimum.

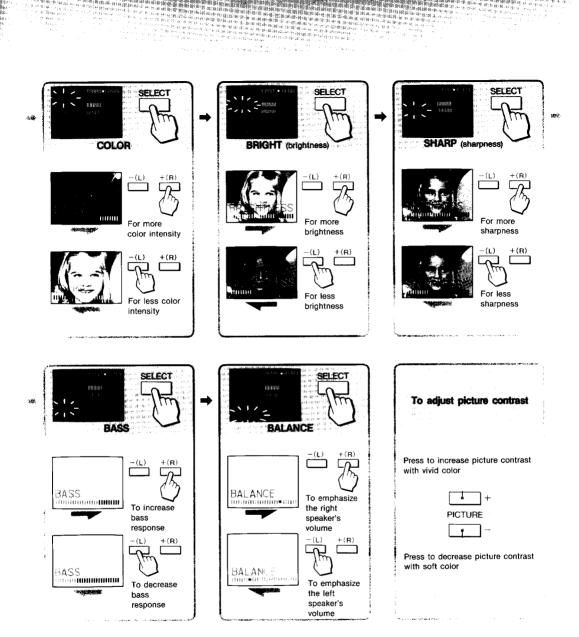


Adjusting surround volume



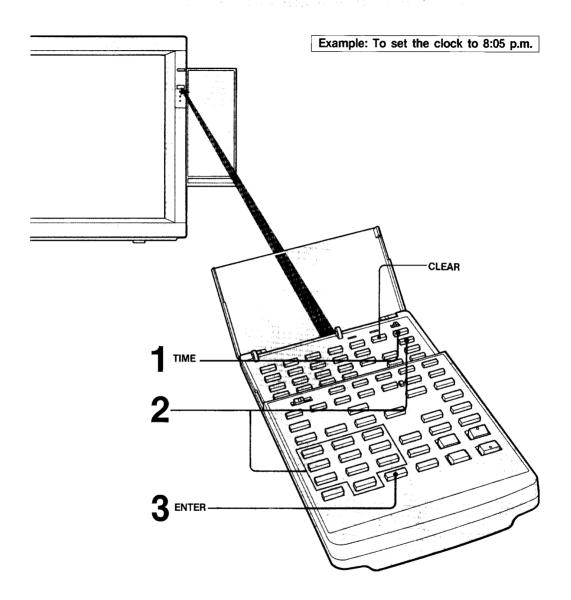


To clear the adjustment levels and restore the factory preset levels at once, press **RESET.**



The display will change as follows:

$$\begin{array}{ccc} \text{HUE} \rightarrow \text{COLOR} \rightarrow \text{BRIGHTNESS} \rightarrow \text{SHARPNESS} \\ \uparrow & \downarrow \\ \text{BALANCE} \leftarrow & \text{BASS} \leftarrow & \text{TREBLE} \end{array}$$



- The internal clock of this TV operates on a 12-hour cycle. If a 24-hour cycle number is displayed, it will be cleared when ENTER is pressed.
- Clock setting will be erased from the unit's memory if the unit is unplugged, or if a power failure occurs.

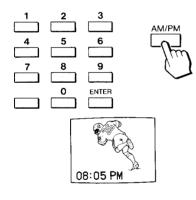
1 Press TIME.





The indication appears in red.

2 Press 0, 8, 0, 5 (0 necessary) and AM/PM.



If you have made a mistake, press CLEAR within 3 seconds and repeat this step.

To make the clock indication disappear, press TIME.

To reset the clock, make the clock indication disappear and then make it appear again. Press CLEAR within 3 seconds and follow the steps above from 2.

3 Press ENTER.

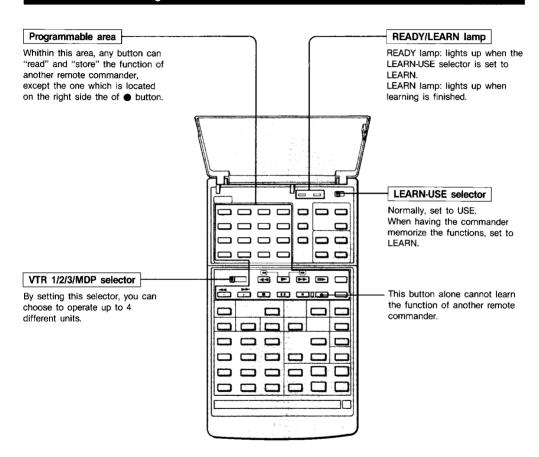




The numbers will turn green to indicate that the clock has been set. (The 0 in front will disappear, and the "AM"/"PM" indication will disappear after 2 seconds.)

The supplied RM-760 remote commander allows you to operate other Sony video equipment having an infrared remote control detector. Furthermore, it can "read" and "store" the functions of another remote commander having an infrared beam transmitter, not only those made by Sony but also those of other manufacturers as well. Thanks to this "learning" function, you can operate your home audio and video equipment only with one remote commander.

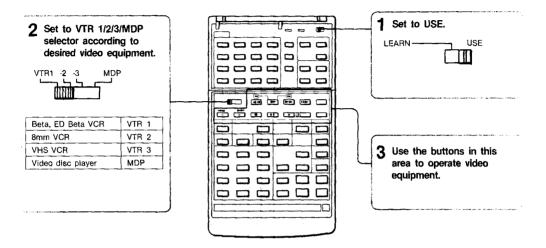
Parts Used for Learning Function



Operating Sony Video Equipment

The supplied remote commander allows you to operate Sony video cassette recorders (including Beta, 8mm, VHS), and video disc player (including multi disc player).

For operating video equipment manufactured by Sony, "learning" is unnecessary.



Operating a Video Cassette Recorder

To start playback Press ►.

To stop playback Press ■.

To advance the tape rapidly Press ►./⊕.

To rewind the tape
To freeze a picture

To resume normal

playback, press again.

To view the picture at a fast speed to find a particular scene Keep pressing ▶►/⊛ or

during playback. To resume normal playback,

release the button.
To view freeze pictures successively at specific intervals

Press **III** during playback.

Operating a Video Disc Player

To start playback
To stop playback
To freeze a picture

Press ▶.
Press ▶.
Press ▶.
Press ▶.

To resume normal playback, press again.

*This function is effective only for CAV (standard-play disc). With CLV (extendedplay disc), the unit will go into the standby mode if II is pressed.

To view the picture at a fast speed to find a particular scene Keep pressing ▶►/⊕ or

during playback. To resume normal playblak, release the button.

To view freeze pictures successively at specific intervals

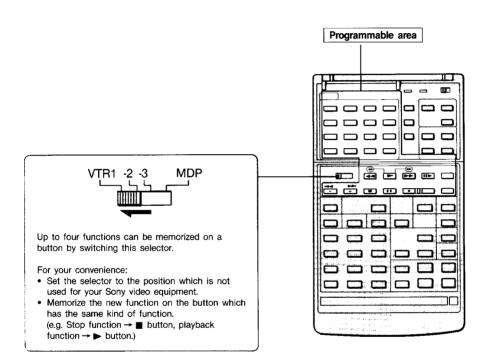
Press III during playback.

- If your video equipment is furnished with VTR selector, set the selector to the same position with the VTR 1/2/3/MDP selector on RM-760.
- If the equipment does not have a certain function, the corresponding button on the remote commander is not effective.

Operating Audio and Video Equipment of Other Manufacturers, or Sony Audio Equipment

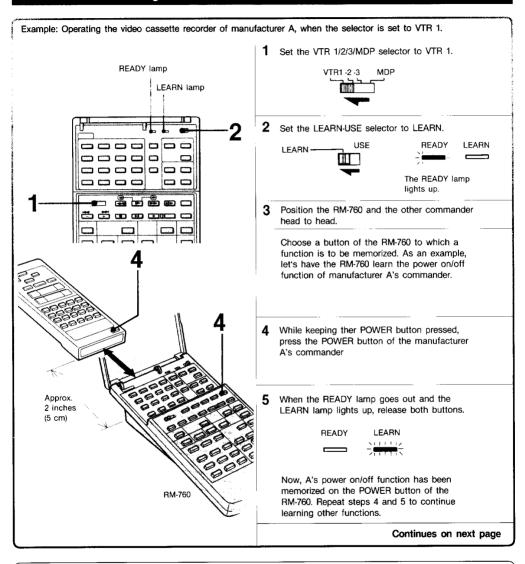
Within the programmable area, any button can memorize the function of the remote commander supplied with other manufacturer's equipment or Sony audio equipment.

A button can memorize a function having no relation to its name on the commander.



When new function is memorized on the button, the original function to operate Sony video equipment is cleared. After you clear the memorized function (see page 33), the button functions for Sony equipment again.

How to Use the Learning Function

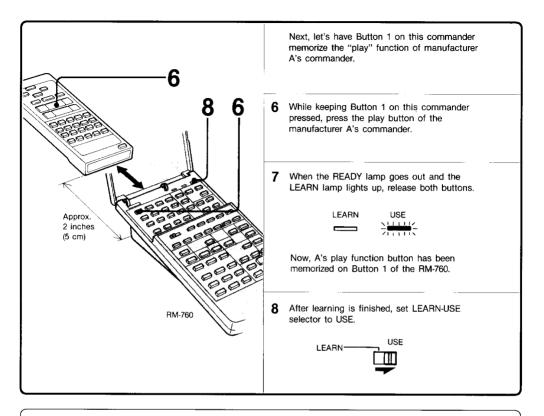


For accurate learning

- Be sure that these commanders are positioned head to head exactly aligned, and approx. 2 inches (5 cm) apart.
- Do not move the commanders during the learning process.



Both READY and LEARN lamps light up if the function has not been memorized. Try again from step 3.



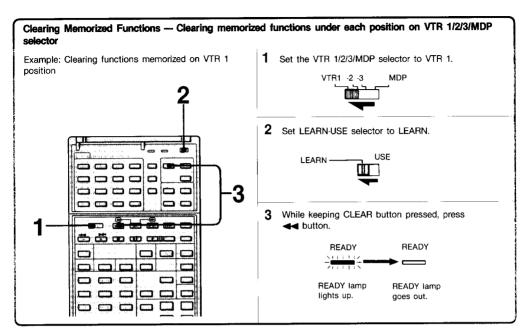
gregories (grigories

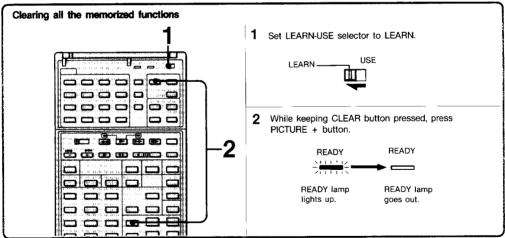
- When operating equipment with learned functions, the VTR 1/2/3 MDP selector should be set to the same position as it was when the functions were memorized. The LEARN-USE selector should be set to USE.
- The functions of other equipment can be memorized by repeating these steps for each of the positions of the VTR 1/2/3/MDP selector. Use the supplied index sheets by placing them on buttons and writing the names of memorized functions for further reference.
- The batteries will last about half a year with normal operation. Replace the batteries before they wear out.
- Replace the batteries within approximately 30 minutes. If not, the memorized function on the buttons may be
- Do not use the learning function for equipment other than audio and video ones.
- Be sure to confirm that the functions have been memorized as a few of the functions of other manufacturer's commanders are not storable on RM-760.

 When you have memorized a new function on a button, the previous function is cleared automatically.

The learning function will no work in the following cases:

- There is a fluorescent lamp or equipment with infrared rays which emit noise.
- → Move the commanders away from them.
- . The batteries are exhausted.
 - → Replace all the batteries with new ones.
- There is an obstacle between the commanders, or the commanders are not positioned head to head and exactly aligned.
 - → Position the commanders properly.





· After clearing memorized functions, the buttons function for Sony video equipment again.

Television system American TV standards Channel coverage VHF: 2~13

UHF: 14-69

Cable TV: 1-125 Microblack Trinitron tube

Picture tube 27-inch picture measured diagonally

29-inch picture tube measured

diagonally

Antenna 75-ohm external antenna terminal for

VHF/UHF

Input VIDEO 1, 2 and 3 IN

S VIDEO IN (4-pin mini DIN) Y: 1 Vp-p, 75-ohms unbalanced,

sync negative

C: 0.286 Vp-p (Burst signal) 75-ohms Video (phono jacks): 1 Vp-p, 75-ohms

unbalanced, sync negative Audio (phono jacks): 500 mVrms (100% modulation) Impedance: 47 kilohms

MONITOR OUTPUT

Output S VIDEO OUTPUT (4-pin mini DIN)

Y: 1 Vp-p, 75-ohms unbalanced,

sync negative

C: 0.286 Vp-p (Burst signal) 75-ohms Video (phono jacks): 1 Vp-p, 75-ohms unbalanced, sync negative Audio (phono jacks): 500 mVrms

(100% modulation) Impedance: 10 kilohms AUDIO OUTPUT (VARIABLE) (phono

jacks) More than 408 mVrms at the maximum volume setting (variable)

Impedance: 10 kilohms FRONT: 10W × 2 Speaker output

SURROUND: 7W × 2 Power requirements 120V AC, 60Hz Power consumption 260W (max.)

3.6W (in standby condition)

Accessories supplied Programmable Commander RM-760 with 4 size AA (R6) bateries

Antenna connector (1) Antenna connecting cable (1)

Speaker cords (2) Optional accessories U/V mixer EAC-66

> Connecting cord VMC-810/820S RK-A74 YC-15V/30V

Design and specifications are subject to change without notice.

Disturbances in picture and sound can often be eliminated by checking the symptoms and following the suggestions listed below.

SYMPTOM	CHECK AND ADJUST
Poor or no picture (Screen not lit), good sound	Adjust PICTURE. Adjust BRIGHT. Check antenna/cable connections.
Good picture, no sound	Press VOLUME + on the TV or VOL + on the Remote Commander. Press MUTING on the Remote Commander. Check that the MTS button is set correctly. Check that the TV/VIDEO button is set correctly. Set the FRONT SPEAKER switch to ON.
No picture (screen not lit), no sound	Is POWER switched on? Plug the unit into a wall outlet. Check that the TV/VIDEO button is set correctly.
No color	Is it a color program? Adjust COLOR.
Snow and noise only	Is it an active or the correct channel? Check the CATV switch setting. Check the ANT/AUX button setting. Check antenna/cable connections.
Learning function on the commander does not work.	Check that the commanders are positioned properly. Check if the batteries are exhausted. If there is fluorescent lamp near by, move the commanders away from it.
Dotted lines or stripes	This is often caused by local interference. (e.g. cars, neon signs, hairdryers etc.) Adjust antenna for minimum interference.
Double images or	Reflections from nearby mountains or buildings often cause this problem. A highly directional outdoor antenna or a CATV cable

If the problem persists, contact your nearest service facility.